Guaranteeing Chemical Release Mitigation Project Outcomes with the Aid of High Resolution Data Sets

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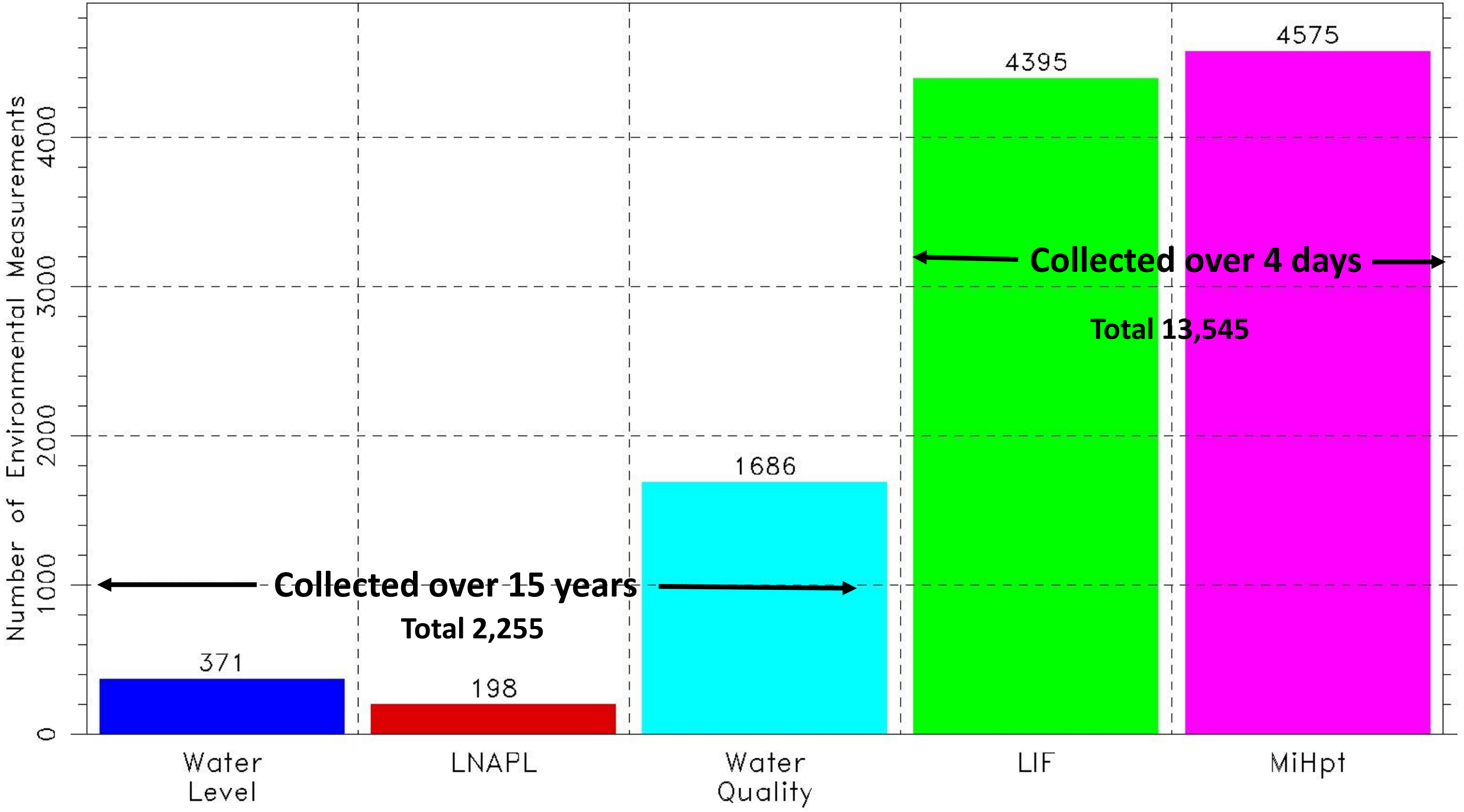
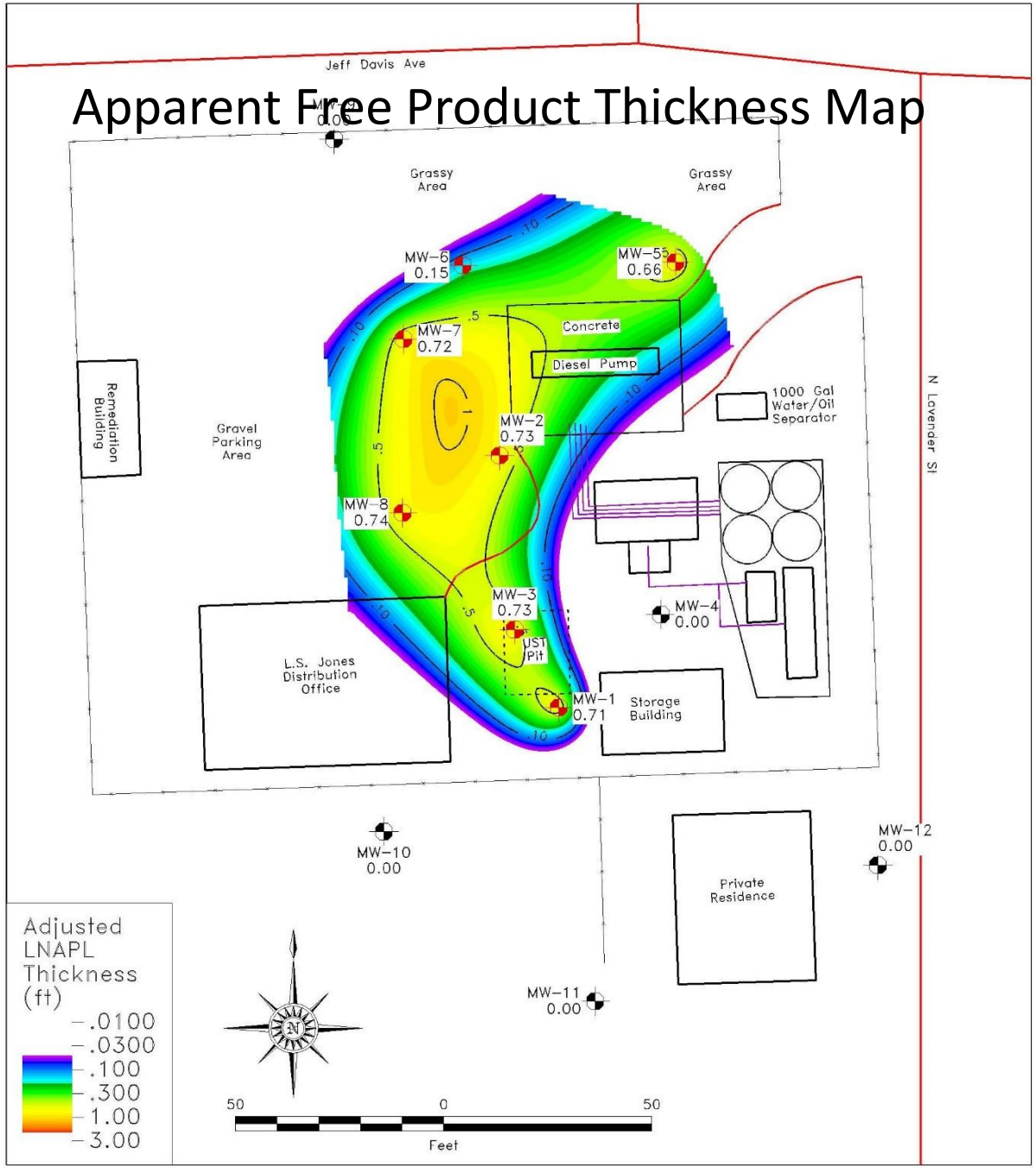
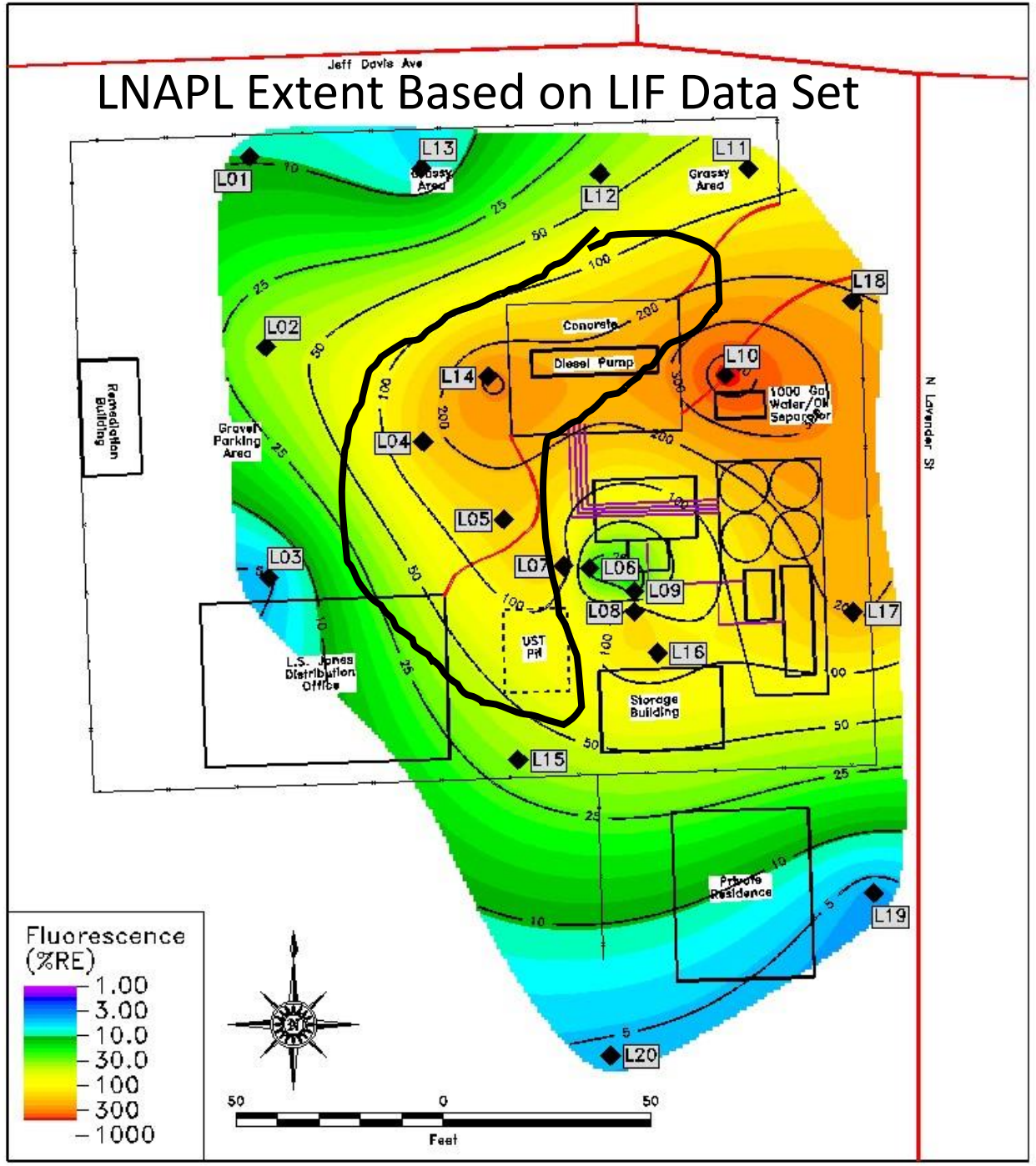

Number of Environmental Measurements
0
1000
2000
3000
4000
371
198
1686
4395
4575
Collected over 15 years
Total 2,255
Collected over 4 days
Total 13,545
Water Level
LNAPL
Water Quality
LIF
MiHpt

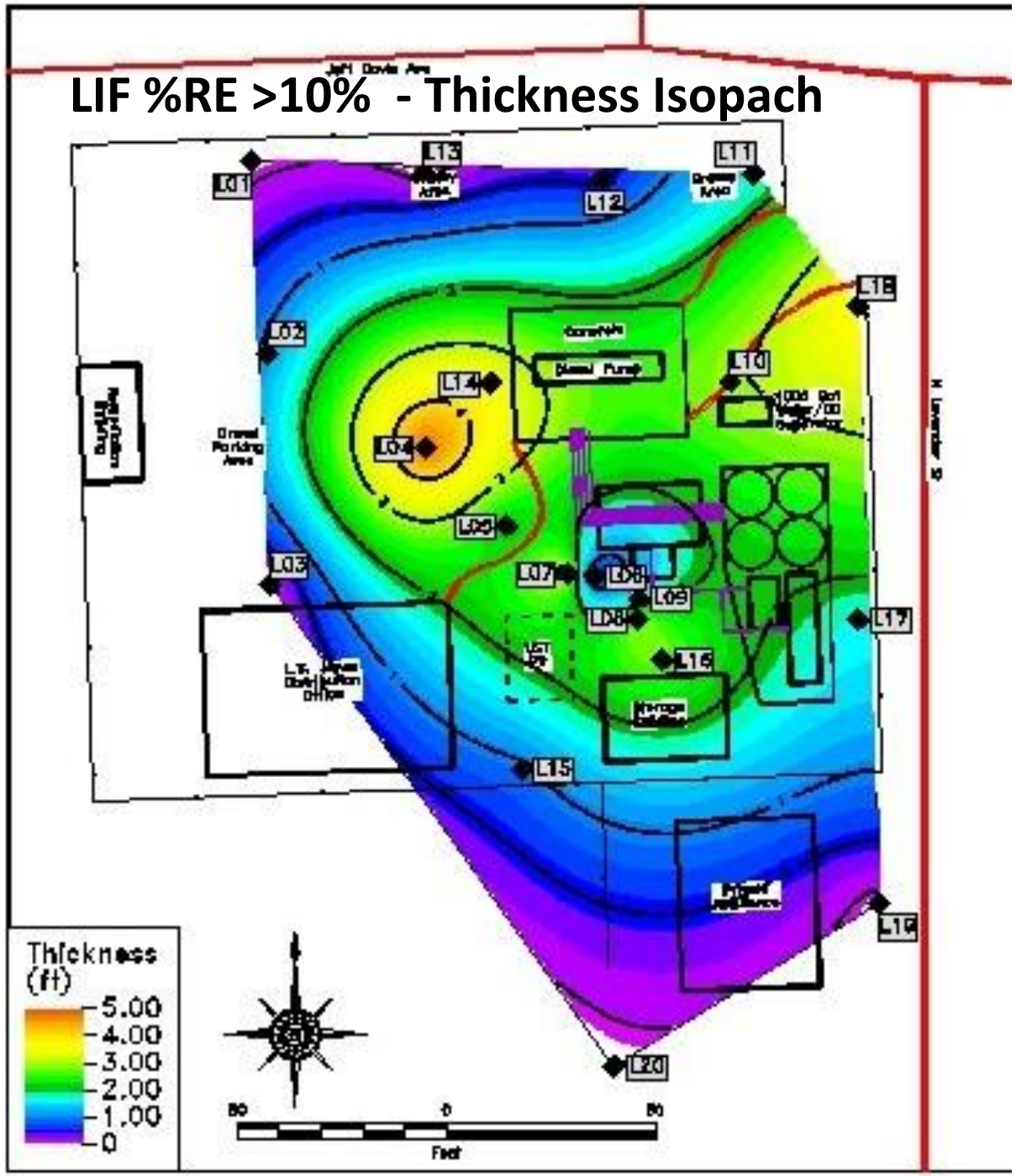
Apparent Free Product Thickness Map



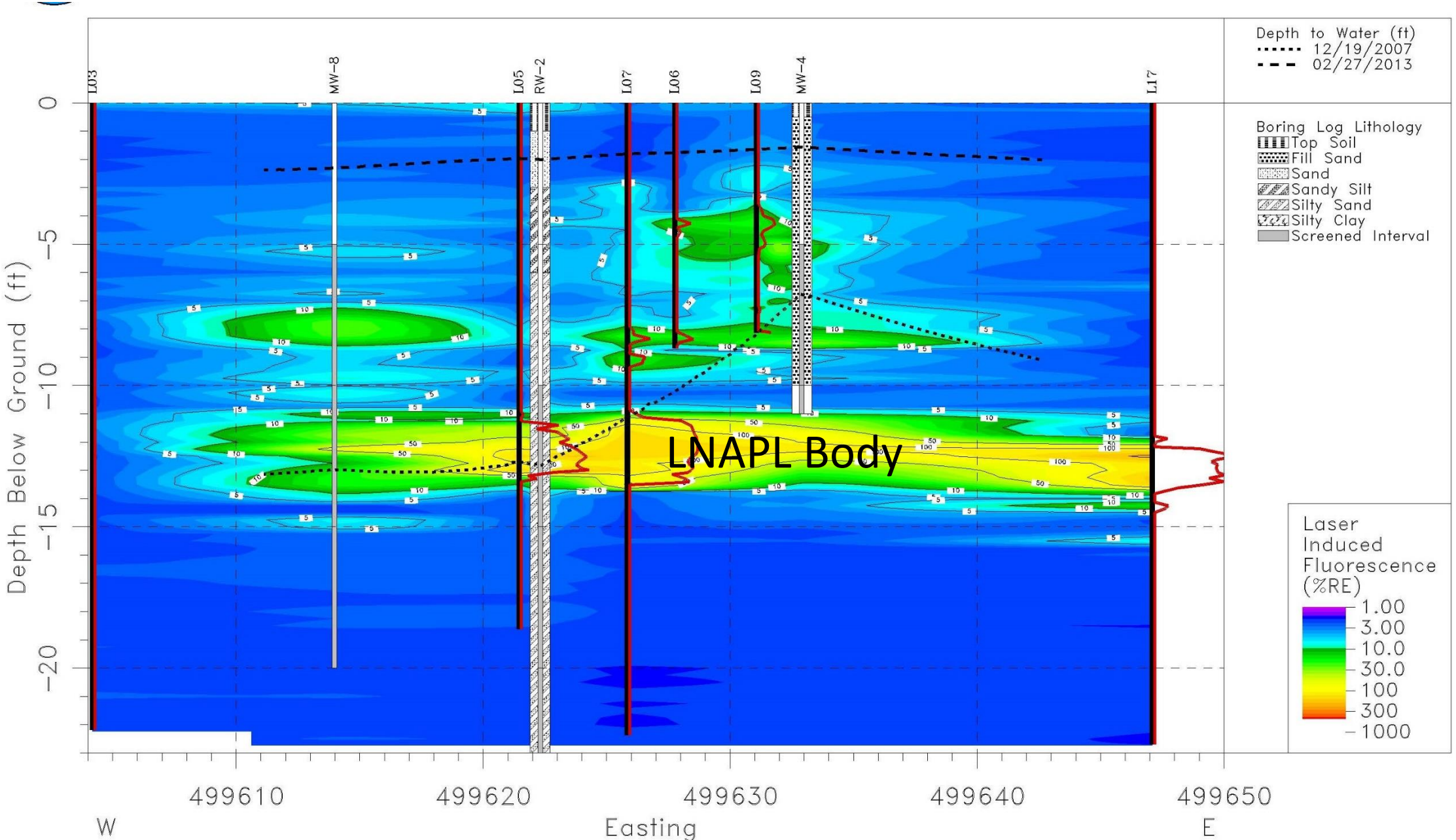
LNAPL Extent Based on LIF Data Set



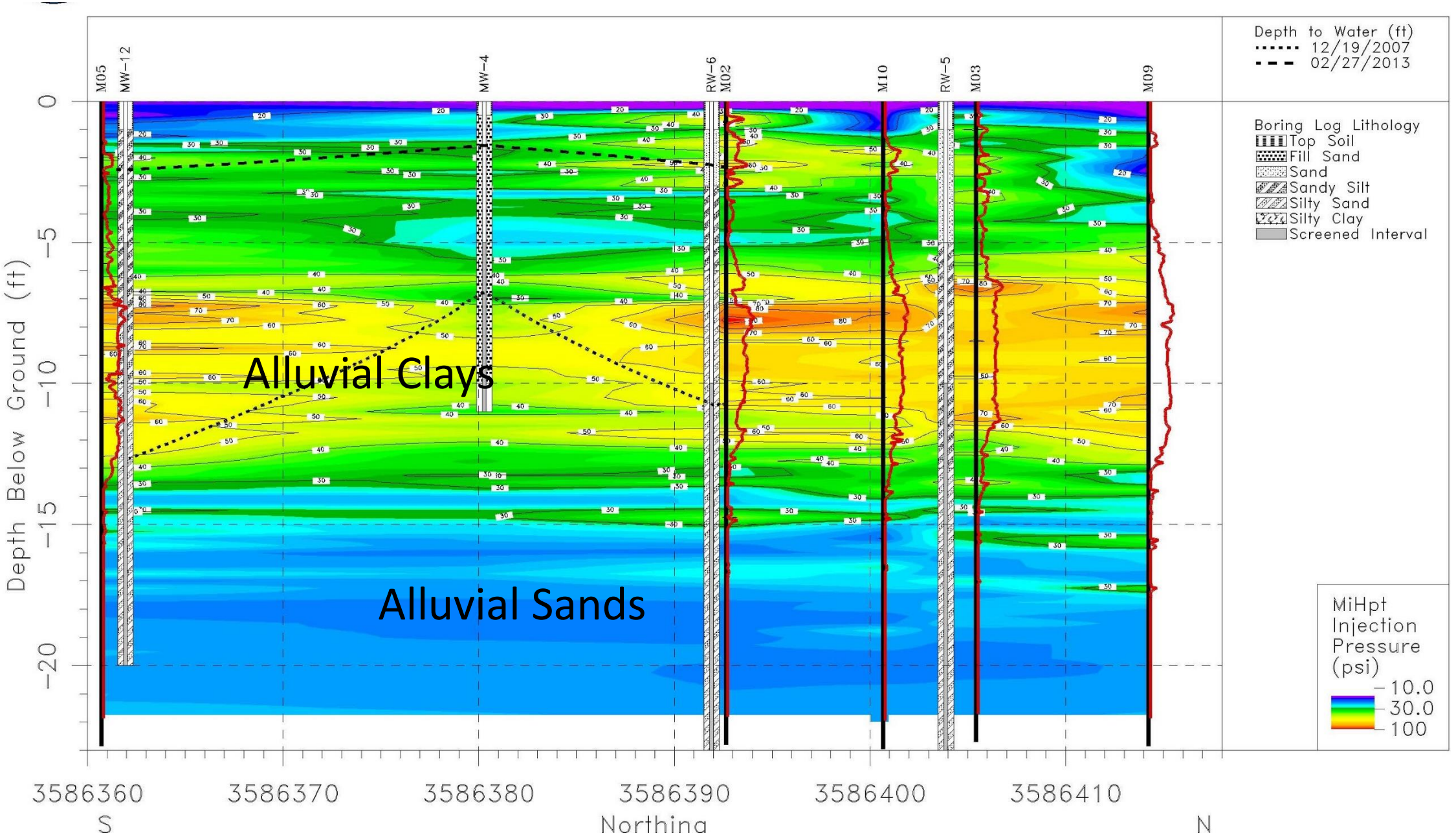
LIF %RE >10% - Thickness Isopach



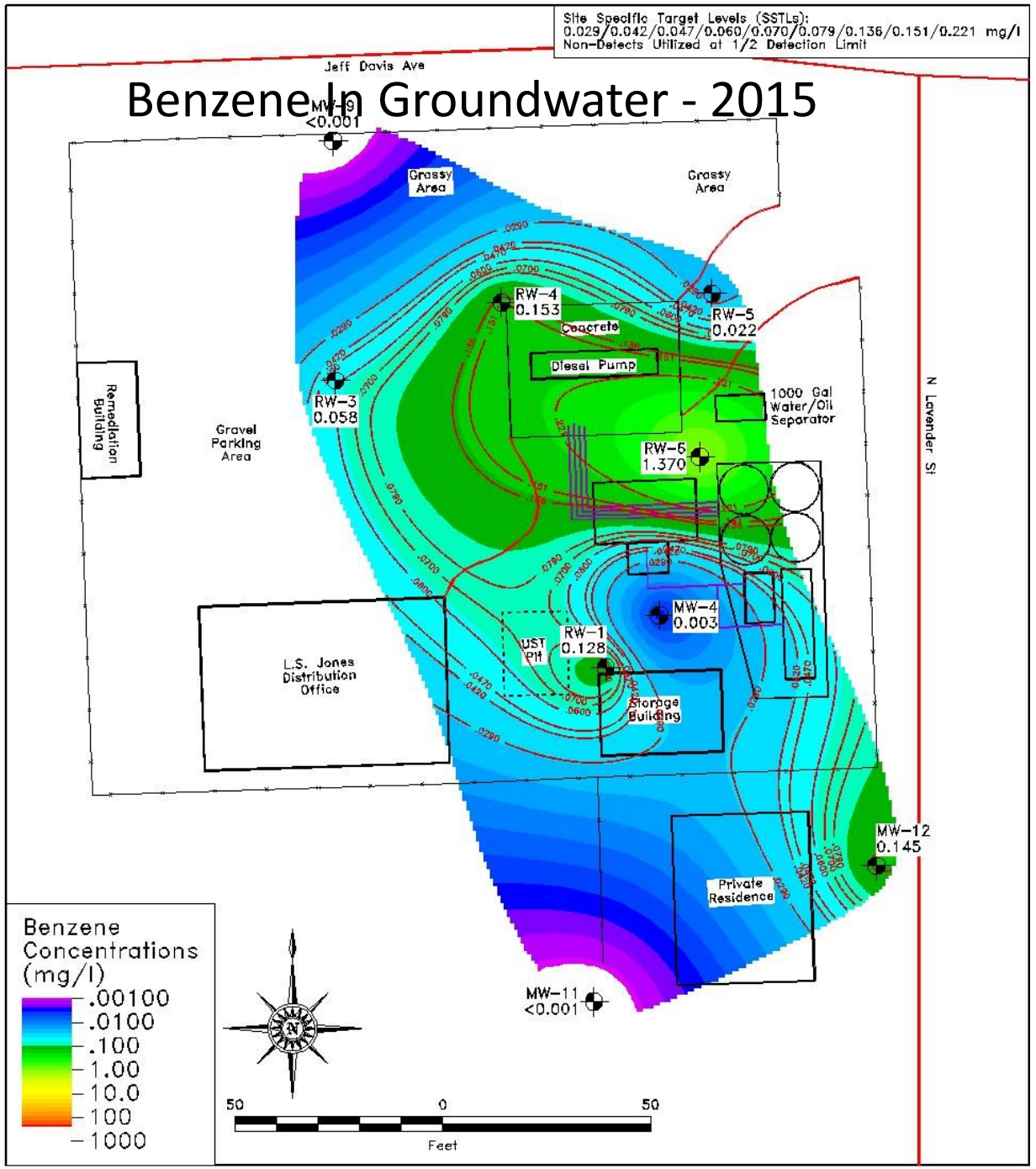
Cross-section - LIF %RE Data



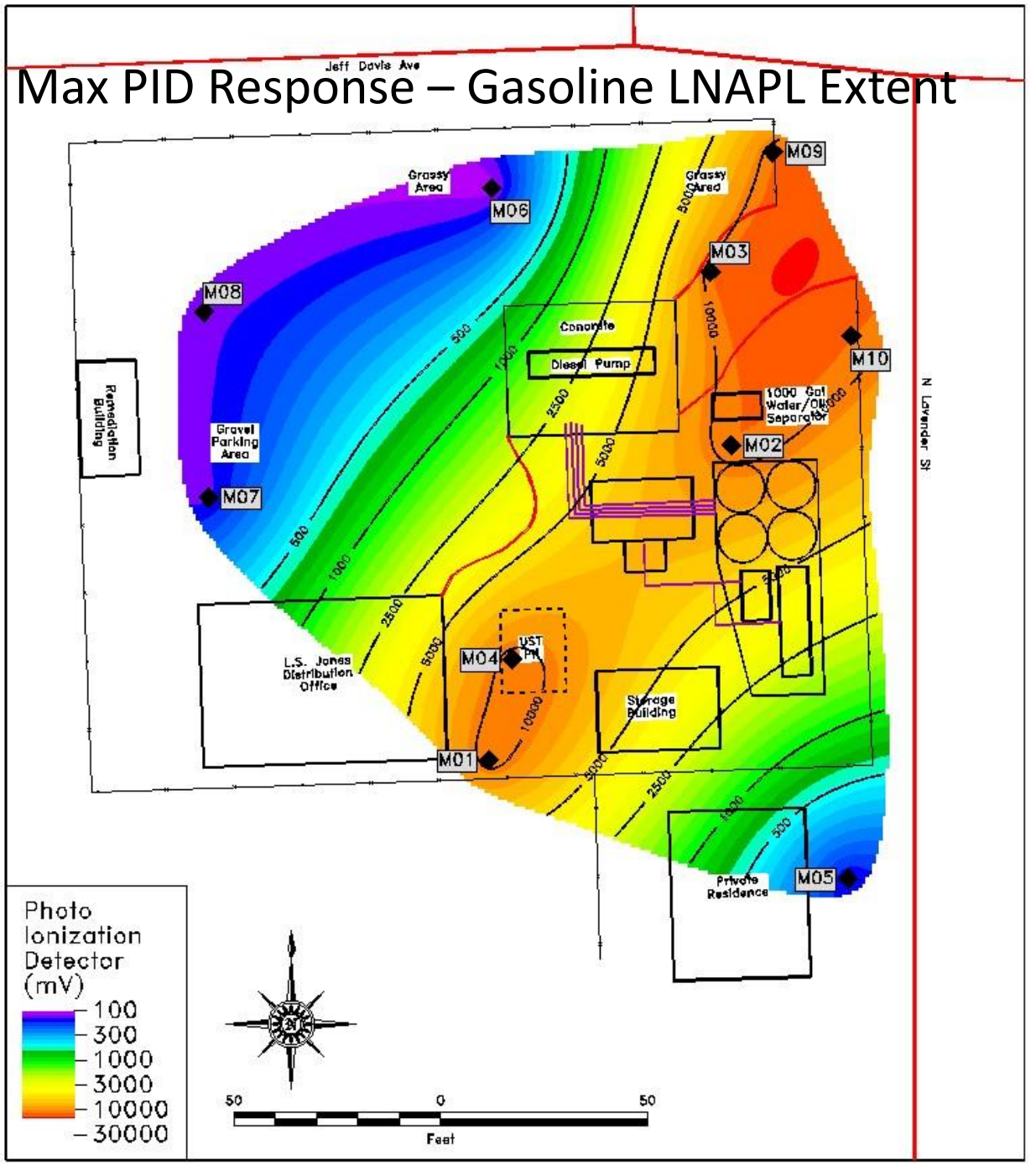
Cross-section - HPT Injection Pressure Data



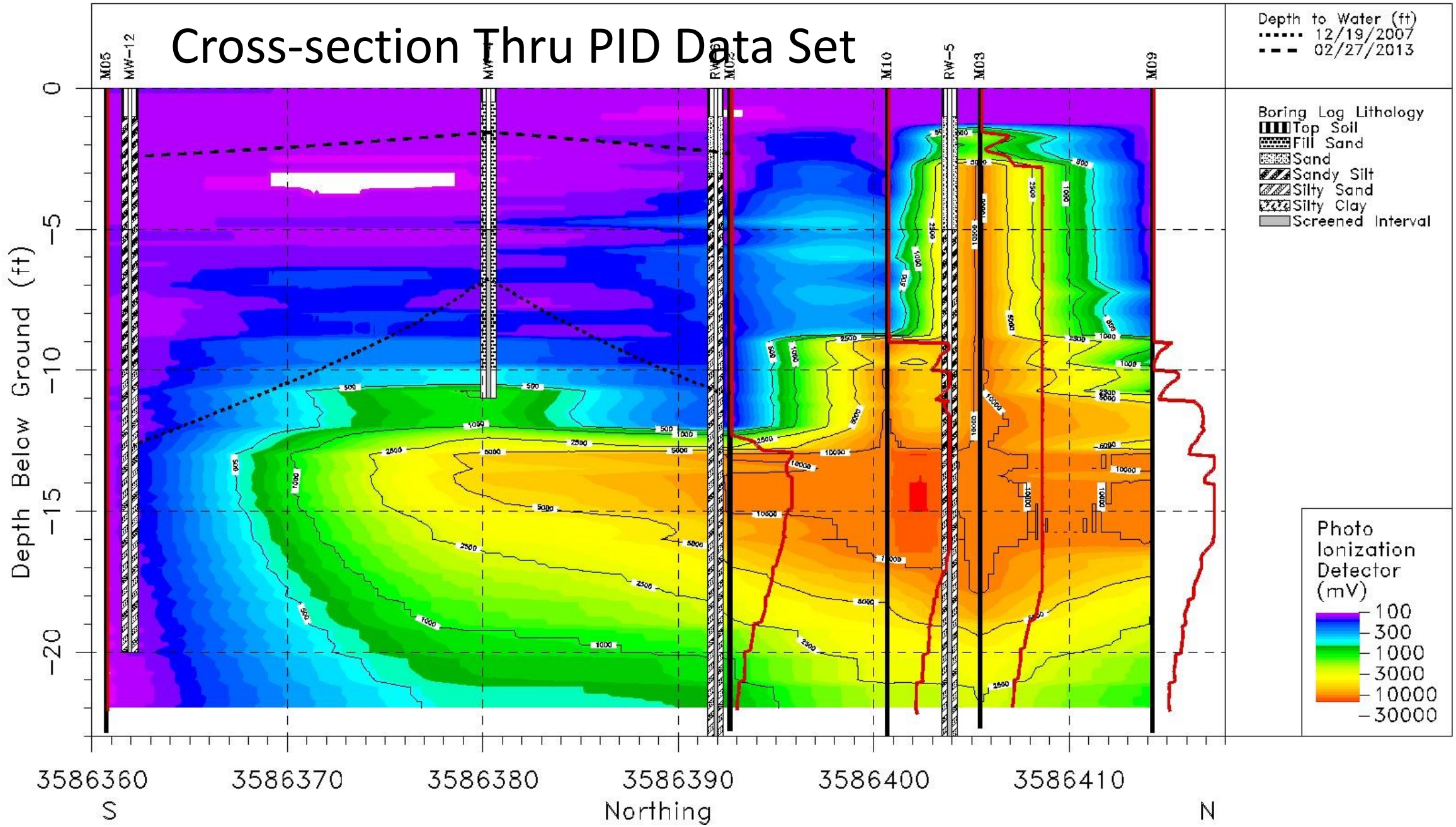
Benzene In Groundwater - 2015



Max PID Response – Gasoline LNAPL Extent



Cross-section Thru PID Data Set



What Can Be Guaranteed?

- Removal of Shallow Source Areas to Aid Future Redevelopment.

What Other Benefit Could Be Achieved with High Certainty?

- Reduction in the LNAPL Mass Contained in the Sand Deposit.

A Path Toward Guaranteeing Chemical Release Mitigation Project Outcomes

1. Establish desired **Results** with Stakeholders.
2. Develop Initial Conceptual Site Model (CSM).
3. **Evaluate what Results can actually be achieved based on the Initial CSM.**
4. Design Field Investigation based on Initial CSM and desired **Results.**
5. **Implement Investigation and Update CSM and Achievable Results in Real-Time.**
6. Confer with Project Stakeholders in Real-time.
7. Crunch Investigation Data.
8. **(If Applicable)** Pilot Test Remediation Programs with High Resolution Tools

Thank You - Any Questions?

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